Amendments to the Claims

This listing of claims will replace all prior version and listings of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Currently amended) A method for allowing update and edit control over an extended time period in a database system, the method comprising:

defining library control functions in a database system, including providing a checkout function to lock at least one cell in a managed database table of the database system; wherein defining library control functions further comprises creating a set of update and delete triggers in correspondence with the checkout function, wherein defining library control functions further comprises creating a set of control tables for each selected table that contains columns enabled for control under the library control functions; and

utilizing the library control functions via structured query language statements to ensure data integrity during accessing of complex data objects comprising opaque data types in the database system, wherein utilizing the library control functions further comprises utilizing the set of control tables to designate a primary key, the primary key being based on an identity of a user accessing data as well as a column name of the data being accessed, further comprising utilizing the primary key as an edit control mechanism for a checked-out cell until an update occurs by the user.

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Currently amendedl) The method of claim [3] 1 wherein utilizing the library control functions further comprises utilizing the library control functions to control access to a workflow document.

8. (Original) The method of claim 7 wherein the workflow document further comprises a decomposed XML document.

9. (Original) The method of claim 8 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.

10. (Original) The method of claim 9 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.

11. (Canceled)

12. (Currently amended) A system for allowing update and edit control over an extended time period in a database system, the system comprising:

at least one computer processing device; and

a database management system installed on the at least one computer processing device,

the database management system supporting definition of library control functions and utilization

of the library control functions via structured query language statements that include a checkout

function to lock at least one cell in a managed database table of the database system to ensure data

ntegrity during accessing of complex data objects comprising opaque data types in the database system,

wherein the database management system further supports creation of a set of update and delete triggers

in correspondence with the checkout function, wherein the database management system further supports

creation of a set of control tables for each selected table that contains columns enabled for control under

the library control functions, wherein the database management system further supports utilizing the

library control functions through utilizing the set of control tables to designate a primary key , the

primary key being based on an identity of a user accessing data as well as a column name of the data

being accessed, wherein the database management system further supports utilizing the primary key as

an edit control mechanism for a checked-out cell until an update occurs by the user.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Currently amended) The system of claim [13] 12 wherein the database management

system further supports utilizing the library control functions to control access to a workflow document.

18. (Original) The system of claim 17 wherein the workflow document further comprises a decomposed XML document.

19. (Original) The system of claim 18 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.

20. (Original) The system of claim 19 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.

21. (Canceled)

22. (Currently amended) A computer readable medium containing program instructions for allowing update and edit control over an extended time period in a database system, the program instructions comprising:

defining library control functions in a database system, including providing a checkout function to lock at least one cell in a managed database table of the database system and creating a set of update and delete triggers in correspondence with the checkout function; wherein defining library control functions further comprises creating a set of control tables for each selected table that contains columns enabled for control under the library control functions; and

utilizing the library control functions via structured query language statements to ensure data integrity of opaque data types in the database system wherein utilizing the library control functions further comprises utilizing the set of control tables to designate a primary key, the primary key being based on an identity of a user accessing data as well as a column name of the data being accessed,

further comprising utilizing the primary key as an edit control mechanism for a checked-out cell until an update occurs by the user.

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Original) The computer readable medium of claim 22 wherein utilizing the library control functions further comprises utilizing the library control functions to control access to a workflow document.

27. (Original) The computer readable medium of claim 26 wherein the workflow document further comprises a decomposed XML document.

28. (Original) The computer readable medium of claim 27 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.

29. (Original) The computer readable medium of Claim 28 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.